

The Chartered Institute of Building (CIOB)

submission to

Scottish Government

on the consultation

Proposals for a Heat in Buildings Bill Consultation

Jocelyne Fleming
Policy & Public Affairs Officer – Scotland
e: jfleming@ciob.org.uk
t: +44 (0)1344 630 847

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Introduction

The Chartered Institute of Building (CIOB) is the world's largest and most influential professional body for construction management and leadership. We have a Charter to promote the science and practice of building and construction for the benefit of society, and we have been doing that since 1834. Our members, over 2,600 of which are in Scotland, work worldwide in the development, conservation and improvement of the built environment. We accredit university degrees, educational courses and training. Our professional and vocational qualifications are a mark of the highest levels of competence and professionalism, providing assurance to clients and other professionals procuring built assets.

Background & Key Points

In recent years, there have been several important consultations covering the sustainability of Scotland's homes. CIOB has taken every opportunity to respond to these, highlighting the important role that decarbonising the construction sector can play in reaching the Scottish Government's necessarily ambitious net zero targets. We have repeatedly encouraged Government to develop a comprehensive, cross-portfolio Delivery Plan for retrofitting to ensure that home improvements are targeted at the areas that are most appropriate on a home-by-home basis and not in a one-size-fits-all approach.

While we support the decarbonisation of heating systems in Scotland, we have serious concerns about the possible implications of the proposed new standards. The approach outlined in this consultation foregrounds the transition to clean heating systems in the absence of the necessary suite of initiatives to address – and fund – improvements to the energy efficiency and fabric of households first. This approach risks leaving households in properties that are inefficient, expensive to heat and, therefore, poses risks both to the Just Transition and to wider public health. Government also needs to ensure that the negative impacts of higher heating bills and costly clean heating system installations do not fall to the most vulnerable households. These systems-wide considerations, as well as the ongoing skills shortage within the construction sector, the availability and costs of clean heating systems, and Scotland's electric grid capacity, must be addressed in a comprehensive resource strategy to sit alongside the proposed new standards if we are to avoid significant negative consequences and tackle fuel poverty and meet net zero targets.

CIOB stands ready to work with Scottish Government to support the development of a long-term, coordinated approach to decarbonise Scotland's built environment and strengthen recruitment and training in the construction sector to ensure the skills and labour necessary to meet net zero targets and avoid the possible unintended consequences that could come from fractured, renewables-focused approaches to decarbonisation.

Full response

1. To what extent do you support our proposal to prohibit the use of polluting heating systems in all buildings after 2045?

- Strongly support
- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

We support the decarbonisation of our heating systems in Scotland. However, we are concerned about the possible consequences of foregrounding the use of clean heating systems and the risks that mandatory

installation of this technology could pose if implemented in isolation. In particular, we are concerned about the absence of the necessary suite of initiatives to address – and fund – improvements to the energy efficiency and fabric of households first. The approach outlined in this consultation risks leaving households in properties that are inefficient, expensive to heat and, therefore, poses risks both to the Just Transition and to wider public health.

While increasing attention is being placed on renewable technologies to achieve net zero targets, retrofit is a complicated, multi-faceted, cross-portfolio challenge for which there is no single, silver-bullet solution. Focusing solely on renewables poses risks to the quality and condition of the built environment and also risks worsening fuel poverty rates. The effectiveness (warmth) and economics (cost) of clean heat solutions such as heat pumps are determined by building fabric. There is little point for a property owner to invest considerable amounts in renewable energy if the property itself is not fuel efficient and, critically, could risk increasing energy bills in a time when many households are facing fuel poverty.

Whilst we understand the environmental benefits of installing heat pumps as an alternative to traditional heating sources, if installed in isolation, there are downsides to heat pumps, especially in the short term. Specifically, heat pumps are expensive to operate, leading to higher upfront/short-term costs, with cost savings only accruing over the long term.

A historic focus on renewables has side-stepped the fabric first approach, and in so doing, left many homes with incomplete retrofit measures, for instance with heat pumps fitted, but no external wall insulation. Not only do these projects leave housing with suboptimal efficiency in terms of their energy use, but subsequent upgrades to the fabric can then render the existing heat pumps too big for the decreased load required.

According to the Energy Saving Trust, the current cost of installing both air and ground source heat pumps is around £8,000 to £14,000 and £15,000 to £25,000, respectively.¹ A survey of 2,000 Scottish residents, conducted by the Chartered Institute of Building (CIOB) in autumn 2023, asked respondents what, if anything, prevents them from making energy improvements to their homes, and what would incentivise them to do so. Affordability was cited by around 40% of people as a barrier, and a lack of understanding of how to improve energy efficiency (19%) was also among the top reasons.² Regulation alone is not sufficient to overcome the significant financial and practical barriers that exist to the uptake of these technologies. CIOB urges Government to implement greater financial incentives and grants across tenure, and address issues with governance, administration and awareness of existing programmes to better support households that cannot afford to decarbonise their heating system.

Further, given the high cost of electricity, installing clean heating systems in the absence of fabric upgrades could leave vulnerable households facing higher energy bills, thus worsening the fuel poverty crisis. The rate of fuel poverty among households using **electricity** as primary heating fuel was 41%, higher than for households using gas (16%), oil (23%) and other fuel (22%) as their primary heating fuel. This reflects the higher per unit cost of electricity relative to gas, and oil.³ As such, the implementation of new standards must come with a comprehensive package of measures to support homeowners to increase the fabric efficiency of their homes first. We simply cannot put vulnerable households in a position where they are paying more to heat draughty homes.

“There are approximately 2.6 million homes in Scotland with only 11% (278,000) of these having a renewable or low emissions heating system installed.”⁴ Therefore, converting all Scottish households to clean heating systems will require a significant pipeline of construction professionals to undertake this work. The construction sector is

¹ Energy Saving Trust, [Air source heat pumps vs ground source heat pumps](#), October 2021.

² Chartered Institute of Building (CIOB), [Two in five Scottish residents can't afford energy efficiency upgrades says CIOB survey](#), October 2023.

³ Scottish Government, [Scottish House Condition Survey: 2021 Key Findings](#), May 2023, p. 70.

⁴ Built Environment-Smarter Transformation, [Energy Efficiency Market Analysis and Economic Opportunity Assessment](#), July 2023, p. 10.

facing a well evidenced – and worsening – skills shortage across a range of roles. The Construction Industry Training Board (CITB) Construction Skills Network forecasts that Scotland’s construction sector will need to recruit an additional 3,910 people annually in order to meet demand and cover churn.⁵ Further, the geographical split of the construction sector may mean that the appropriate, accredited and trained professionals are not as readily available in certain areas of the country to properly oversee the installation and maintenance of heat pumps. At present, Scotland simply does not have the number of qualified people required to install clean heating systems at the pace and scale required to meet these targets. According to the MCS Installations Database, there were only 204 MSC certified contractors installing circa 6,295 air source heat pumps in Scotland in 2023.⁶

Ensuring the construction industry has a steady supply of labour with the necessary skills to meet the present-day and future needs of the built environment continues to be one of the biggest issues for the industry. The development of new energy efficiency standards across tenure – we note parallel proposals containing within the proposed Social Housing Net Zero Standard consultation – will add additional pressure on the system to upskill and recruit people with the necessary green skills. This will be a slow process and will require considerable investment. Current funding schemes continue to be a barrier for many firms when it comes to recruiting an apprentice and up-skilling staff. With so many short-term funding pots available, access to finance is made more complex for many SMEs, especially when long-term investment is required. We believe it is vital for the future of construction to have an apprenticeship system that works for the industry in order to address skills gaps and shortages. Successful implementation of the Heat in Buildings Standard will require Scottish Government-led funding streams targeted at developing green skills and regulation-specific training across the entire supply chain and should include changes to relevant university and college course provision to ensure graduates are entering the workforce with the necessary skills.

As such, while we support the decarbonisation of heating systems in Scotland, we have serious concerns about the possible implications of the proposed new standards. We are particularly concerned about the absence of a comprehensive resource strategy to address these challenges. Consumers need to be provided with funding, assistance, guidance and assurance. Government also needs to ensure that the negative impacts of higher heating bills and costly clean heating system installations do not fall to the most vulnerable households. These systems-wide considerations, as well as the ongoing skills shortage within the construction sector, the availability and costs of clean heating systems, and Scotland’s electric grid capacity, must be addressed in a comprehensive resource strategy to sit alongside the proposed new standards if we are to avoid significant negative consequences and tackle fuel poverty and meet net zero targets.

CIOB stands ready to work with Scottish Government to support the development of a long-term, coordinated approach to decarbonise Scotland’s built environment and strengthen recruitment and training in the construction sector to ensure the skills and labour necessary to meet net zero targets and avoid the possible unintended consequences that could come from fractured, renewables-focused approaches to decarbonisation.

2. To what extent do you agree that we should introduce a minimum energy efficiency standard to be met by private sector landlords by the end of 2028 (even if they are already using clean heating)?

- Strongly support
- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don’t know

⁵ CITB, Construction Skills Network, [The Skills Construction Needs, Scotland Five-Year Outlook 2023-2027](#), January 2023.

⁶ MCS Dashboard, [Air Source Heat Pumps Data](#), 2023.

Scotland's built environment needs to be retrofitted at a greater scale and pace than ever before if we are to meet our net-zero, energy efficiency and fuel poverty targets. As the Scottish Government has recognised, heating our built environment is the third-largest cause of greenhouse gas emissions in Scotland and meeting our 2030 net zero targets will require a 75% reduction in emissions. Therefore, steps must be taken to address the energy efficiency of our built environment, particularly homes. We further support the 'tenure-neutral' approach outlined in the Housing to 2040 strategy.

As figures released by in the Scottish House Condition Survey highlight, "the highest emissions were observed for private rented dwellings (78 kg/m²) and lowest for housing association dwellings (63 kg/m²), with emissions from the other tenures falling in between those values."⁷ The Private Rented Sector (PRS) is, therefore, a tenure which needs urgent attention to ensure parity across tenure and the health of all of Scotland's homes. However, we have significant concerns about the possible consequences of a 'one-sized fits all' approach to implementing new standards for the PRS. As such, we urge Scottish Government to engage further with tenants' associations, professional bodies like CIOB, and representatives from the PRS to identify possible barriers to the successful implementation of this regulation within the specified timeframe, and, critically identifying mechanisms to mitigate possible negative outcomes, in particular for tenants of the PRS and for the availability and affordability of housing across Scotland. Further, the timelines for the implementation of this proposed standard pose significant challenges due to, as discussed, lack of awareness of and difficulty in accessing funding programmes to support the costs of undertaking these measures, and with the ongoing supply chain and skills shortages facing the sector.

As with other tenures, funding and delivery are critical elements of meeting the retrofit challenges within the PRS and are currently presenting problems. Siloed, short-term thinking has hindered our collective ability to ramp up retrofit works and requires urgent action/Government intervention to change. Further, 'patchwork' retrofit funding is fragmented and complicated and funding levels are insufficient, relative to the scale of the problem and the costs of retrofit projects. Additionally, programme design problems and limited awareness are limiting uptake of existing funding streams.

As we have highlighted in our response to the Scottish Government's proposed Social Housing Net Zero Standard, there are significant benefits to working across-tenure at a neighbourhood-wide level. The best way to optimise onsite and supply chain logistics, bring costs down, create a steady pipeline of work, decrease disruption to tenants, and recruit and retain the necessary people to undertake retrofit works is to approach energy efficiency upgrades at the neighbourhood level. Particularly in rural and island communities, taking a cross-tenure, neighbourhood-wide approach to construction allows for the creation of a shared construction site and allows contractors to establish a supply chain, move materials in bulk, recruit and, as often needed, train and upskill local workforces. In the absence of this joined-up approach, all parties lose out on economies of scale. Further, the supply chain and workforce remain insecure, which worsens the skills gap. Ultimately, in the current system, opportunities are missed to bring all tenures along on a just transition, ensuring that everyone in Scotland has a home that is safe, warm, affordable and energy efficient to heat.

We need to bring everyone on board, and think holistically about retrofit programming for all tenures, ensuring equitable access to good quality homes for everyone in Scotland. This means simplifying access to funding for private landlords and owner-occupiers and developing a reserve fund to support retrofit projects where additional support is needed to retrofit mixed-tenure common spaces in cases where some parties are unwilling or unable to contribute to these works.

Beyond simplifying access to funding, Government awareness programmes must be vastly expanded and improved. Recent consumer research conducted by the CIOB found that affordability of energy efficiency upgrades was a barrier to undertaking these projects for 40% of households, and that awareness of energy

⁷ Scottish Government, [Scottish House Condition Survey: 2021 Key Findings](#), May 2023, p. 53.

efficiency programmes is alarmingly low amongst the Scottish public: over a third of households (39%) are unaware of past or current Government support schemes.⁸

So, while we support a neighbourhood-based approach to retrofit projects and to achieving net zero targets, more must be done to facilitate the mechanisms and funding needed to support these approaches. As such, alongside implementing increasingly stringent standards, the Scottish Government must take immediate action to remove these barriers and address these challenges. Long-term leadership, planning, and action from the Scottish Government are needed and fast.

As highlighted repeatedly in this consultation, we reiterate our concerns with the efficacy and accuracy of EPC ratings. We urge Scottish Government to collaborate with industry to develop new metrics for measuring energy and fabric efficiency instead of relying on the current, problematic, EPC system.

3. To what extent do you agree that we should introduce a minimum energy efficiency standard to be met in owner occupied homes (which still have a polluting heating system) by the end of 2033?

- Strongly support
- Somewhat support
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

As outlined elsewhere in this consultation response, CIOB is concerned about the possible consequences of foregrounding the use of clean heating systems and the risks that mandatory installation of this technology could pose if implemented in the absence of the necessary suite of initiatives to address – and fund – improvements to the energy efficiency and fabric of households first. As such, we are very concerned about the proposals, as outlined in section 2.34 of the consultation paper that “owner occupied homes that have ended their use of polluting heating will not be required to meet the minimum energy efficiency standard”. Focusing solely on renewables poses risks to the quality and condition of the built environment and also risks worsening fuel poverty rates. As such, while we are supportive of measures that look to increase the energy efficiency of housing and recognise that this may need to come – in part – through the implementation of new standards, proposals that exempt households with clean heating systems from meeting minimum energy efficiency standards pose significant risks, in particular to rates of fuel poverty.

As we have outlined elsewhere in this consultation, rates of fuel poverty in Scotland are higher amongst households using electricity as their primary heating fuel. This reflects the higher per unit cost of electricity relative to gas, and oil.⁹ As such, there must be sufficient programmes in place to address building fabric, thereby reducing overall energy demand and only then installing electric heating systems. Otherwise, we risk putting vulnerable households in a position where they are paying more to heat draughty homes with clean energy.

Additionally, we are concerned that the capacity of existing infrastructure is insufficient to fully support a reliable switch to electric and decarbonised heating. Research has highlighted the need for network-wide innovation in order to mitigate concerns regarding the security of supply as consumer reliance on the electricity network increases, especially in rural networks with overhead lines supplying sparsely located demand centres.¹⁰ To avoid possible unintended consequences and costs, regulations should only be implemented once capacity challenges within the wider network have been understood and addressed.

⁸ CIOB, [Two in five Scottish residents can't afford energy efficiency upgrades says CIOB survey](#), October 2023.

⁹ Scottish Government, [Scottish House Condition Survey: 2021 Key Findings](#), May 2023, p. 70.

¹⁰ McGarry, Galloway, and Burt, [Decarbonisation of Rural Networks Within Mainland Scotland: In Support of Intentional Islanding](#), March 2021.

Further, we are particularly concerned about the possible negative financial impacts meeting new fabric and energy efficiency standards may have on already vulnerable households. This concern is not only focused on the significant costs of installing clean heating systems and fabric upgrade measures, but also to the ongoing costs of running and maintaining these systems over time. We appreciate the considerations given within the consultation to the mechanisms through which these costs could be paid over an extended period of time. However, in a time when cost of living and fuel poverty rates are rapidly increasing, even a relatively modest increase in fuel bills or mortgage rates could have very significant consequences for households that are already struggling financially.

We appreciate the Scottish Government's consideration of unique funding models and mechanisms that could be engaged to support these retrofit projects, as outlined in the consultation paper and wholly welcome the Government's reassurance that providing financial supports will remain a priority. However, as we outlined in our previous responses, there are significant challenges with the levels of funding and the governance of programmes. Further, the levels of awareness that exist among consumers of energy efficiency programmes must be vastly expanded and improved, as stated in other responses to this consultation, our consumer research indicates worrying levels of awareness of energy efficiency programmes.¹¹

4. Do you agree with our proposal to set a minimum energy efficiency standard that can be met by either installing a straightforward list of measures, or showing a good level of energy efficiency based on a reformed EPC fabric efficiency metric?

- Strongly support
- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

The CIOB, alongside industry partners, has repeatedly called for 'fabric first' approach to retrofit. As such, we welcome the proposals to include a list of measures for upgrades to a home's fabric. However, the specific approach taken for each retrofit project will vary greatly. Even within the 'fabric first', whole-home framework, the specifications and state of each building are the deciding factors in the most appropriate approach. As such, we need to be flexible about what successful retrofit projects look like; ensuring policies, programmes and funding streams allow for the consideration of the individual circumstances arising in each project and neighbourhood and support a variety of approaches, materials, and reasonable measures to be undertaken as is best suited for each building and project.

Further, and as outlined elsewhere in this consultation, our recent research,¹² alongside wider work within the industry, has repeatedly raised concerns about the suitability and accuracy of EPCs. While we recognise the Scottish Government's proposal to reform these metrics, we would urge Government to work with industry to establish a more accurate framework through which to measure energy efficiency. A few potential assessment mechanisms that have been developed and could provide direction and a framework for energy efficiency moving forward are the Royal Institution of Chartered Surveyors (RICS) Whole-Life Carbon Assessment for the Built Environment¹³ and the Whole Life-Cycle Carbon Assessments Guidance.¹⁴

5. What is your view on the initial proposed list of measures to meet the minimum energy efficiency standard?

- Strongly support

¹¹ CIOB, [Two in five Scottish residents can't afford energy efficiency upgrades says CIOB survey](#), October 2023.

¹² CIOB, ["Harnessing Scotland's Social Housing Expertise: How Scottish Government can support the social housing sector to reach its retrofit targets."](#) November 2023.

¹³ Royal Institution of Chartered Surveyors, [Whole Life Carbon Assessment for the Built Environment](#).

¹⁴ Greater London Authority, [Whole-Life Cycle Carbon Assessment Guidance](#).

- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

CIOB has long advocated for a 'fabric first', whole home approach and is thrilled to see these principles reflected in the inclusion of a list of fabric-based measures to meet the minimum standard. We support these proposals in principle, and, critically, the intention to allow for exemptions to be made to allow for homes to be considered compliant when they have adopted those measures that are appropriate, practical and cost-effective for their property.

However, given the importance and possible implications of the measures included (or not) on this list, it is imperative that the list of measures is developed carefully and in collaboration with the construction sector, professional bodies and technical experts. We therefore welcome the note made in footnote 15 of the consultation, outlining that "the technical specification of the list of measures will be consulted on ahead of the introduction of regulations" and reiterate how important it is that Scottish Government consults with the wider construction industry to consider not only the measures most suited to be on this list, but the systems-wide resources that will be needed to secure the supply chain of materials and skilled people to install these measures.

6. Do you think that properties for which most or all of the measures on the initial proposed list are not relevant should be required to meet an equivalent minimum energy efficiency standard?

- **A No – these properties should be considered compliant once they have installed all the measures that are appropriate for their building type, even if this is few or no measures**
- B Yes – they should be required to meet the standard and additional measures should be included on the list (such as solid wall insulation, solid floor insulation, and flat roof insulation), and they should be required to install all of these where feasible
- C Yes – they should be required to meet the standard and additional measures should be included on the list (such as solid wall insulation, solid floor insulation, and flat insulation), but they should be only required to install some of these where feasible and cost effective
- D Yes – they should be required to meet the standard and additional measures should be included on the list (such as solid wall insulation, solid floor insulation, and flat roof insulation), but they should only be required to install some of these where feasible, and they should be allowed additional time to do so.

Meeting increasingly stringent energy efficiency standards may not be possible or practical in some circumstances. Variations in housing type, tenure and location in Scotland may present a significant barrier to retrofitting works. For example, rural, off-grid properties will require a bespoke package of works to ensure viability of retrofitting. Similarly, tenements are often considered difficult-to-treat properties that also require a tailored set of measures to secure the best possible outcomes for energy efficiency as are possible and practical.

Establishing the correct course of action requires flexibility and will vary from project to project. Therefore, we support in-built flexibility and carefully considered exemptions to prevent putting inappropriate measures into homes or unnecessarily burdening households with unsuitable, impractical and overly costly energy efficiency projects.

7. Do you think that an alternative approach to setting the minimum energy efficiency standard is required?

- Yes
- No
- Don't know

EPC ratings are currently not fit for purpose. For instance, they fail to consider elements like wall thickness, so buildings are rated below their actual energy-efficiency levels. As Scottish Government continues to develop policies that rely on EPC ratings as the sole measure of energy-efficiency in our homes, this raises serious concerns about the quality and efficacy of the retrofit projects that may be undertaken to meet regulations.

As stated elsewhere in this response, we welcome the Scottish Government's proposal to reform EPC metrics, but would urge Government, at a minimum, to work with industry on these reformed EPC assessment criteria, considering the opportunities available to use smart meters and other sources of data, including 3D modelling and thermal heat mapping, to feed into the modelling process and improve its accuracy.

8. Do you agree that the use of bioenergy should continue to be permitted in certain circumstances?

- No, it should be prohibited in all cases
- Yes, it should be permitted for those buildings already using it
- Yes, it should be permitted for those buildings who have no other clean heating systems available
- **Yes, it should be permitted for those buildings already using it and for those buildings who have no other clean heating system available**
- Yes, it should be used in wider circumstances (please describe these)

9. To what extent do you support the requirement to end the use of polluting heating following a property purchase?

- Strongly support
- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

We reiterate our concern about the possible consequences of foregrounding the use of clean heating systems and the risks that mandatory installation of this technology could pose if implemented in the absence of the necessary suite of initiatives to address – and fund – improvements to the energy efficiency and fabric of households first.

We recognise that implementing requirements to end the use of polluting heating systems following a property purchase may represent a common-sense juncture at which heating systems can be addressed, and further, could incentivise prospective sellers to switch to clean heating systems to support resale value. However, we are gravely concerned about the possible impacts on energy costs and the overall affordability of housing both at the time of purchase – clean heating systems remain costly to install – and in ongoing operation.

13. To what extent do you support the proposal that the Scottish Ministers should be given powers to extend the circumstances in future (beyond a property purchase) in which people could be required to end their use of polluting heating? This could be, for example, preventing the installation of new fossil fuel boilers when replacing the heating in your home or business premises?

- Strongly support
- Somewhat support
- Neither support nor oppose
- **Somewhat oppose**
- Strongly oppose
- Don't know

Given the considerable barriers that remain in place to the widescale uptake of energy efficiency upgrades including challenges with funding, supply chains, the cost of clean heating technologies and the ongoing skills shortages in the sector, we have concerns about the possible impacts of extending these powers to additional circumstances.

In particular, in the example provided, systems-wide challenges could leave homeowners with a significant, unexpected expense in the event of a 'disaster purchase' upon the breakdown of an existing fossil fuel boiler. Given the timelines to install new clean heating technologies, the considerably higher cost of installing and running these systems and the challenges with accessing financial support quickly and easily all risk leaving households without any heating system for extended periods of time.

14. To what extent do you support our proposal to provide local authorities (and Scottish Ministers) with powers to require buildings within a Heat Network Zone to end their use of polluting heating systems by a given date?

- Strongly support
- Somewhat support
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

The CIOB recognises the value of heat networks and supports mechanisms to encourage participation. However, this will require direction from Government as to the possible locations and opportunities for heat networks. The longer-term the plan and mapping for these heat networks, the better.

In the absence of this long-term clarity, there is a risk that building owners may proceed with the installation of costly clean heating systems, especially in light of the proposed standards, which not only increases the overall investment needed to decarbonise Scotland's energy, but also undermines the possible uptake and opportunities for heat networks.

15. To what extent do you support our proposal to provide powers to local authorities (or Scottish Ministers) that require developers to connect new buildings within Heat Network Zones to a heat network?

- Strongly support
- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

As outlined above, the CIOB recognises the value of heat networks and supports mechanisms to encourage participation. As such, we are supportive of the requirement for developers to connect new buildings that are within Heat Network Zones to a heat network. However, we reiterate the need for long-term clarity and direction from Government to allow developers and the construction sector to adequately account for connection to heat networks.

18. We will need to have a way to monitor if people are meeting the Heat in Buildings Standard, and discussed two options for this. Which do you support?

- Submitting EPCs alone
- Sampling a percentage of buildings
- A combination of the two
- None, there should be no monitoring

- **Another method, please suggest below or explain your selected answer**

As outlined elsewhere in this response, EPCs are not currently fit for purpose and we urge Government to work in tandem with the industry and professionals to reform these metrics. We have concerns about how a sampling model would work in practice. In particular, it creates an imbalance of accountability for certain households who are selected during the sampling process. Further, this model still proposes to rely on EPCs as one means of demonstrating that households have met the standard.

20. To what extent do you support our proposals to modify the Standard or exempt certain people from the need to meet the Heat in Buildings Standard?

- Strongly support
- **Somewhat support**
- Neither support nor oppose
- Somewhat oppose
- Strongly oppose
- Don't know

As we have outlined elsewhere in this response, meeting increasingly stringent energy efficiency standards will not be possible or practical in some circumstances. Variations in housing type, tenure and location in Scotland may present a significant barrier to retrofitting works. For example, rural, off-grid properties will require a bespoke package of works to ensure the viability of retrofitting. Similarly, tenements are often considered difficult-to-treat properties that also require a tailored set of measures to secure the best possible outcomes for energy efficiency as far as possible and practical.

Establishing the correct course of action requires flexibility and will vary from project to project. Therefore, CIOB supports carefully considered exemptions to meeting these standards in order to prevent the installation of inappropriate measures into homes or unnecessarily burdening households with unsuitable, impractical and overly costly energy efficiency projects.